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AUTHOR Williams, Gerald D.
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ABSTRACT

The Health Services Careers Program (HSCP) at the Johns Hopkins Medical Institutions (JHMI) in East Baltimore is a multi-purpose, inter-agency program designed to facilitate part-time employment, on-the-job training, and guidance in health occupations for economically disadvantaged high school students. Since 1966, HSCP has enrolled over 1300 individual students through a variety of projects and obtained work sites for the students at more than 100 different departments within JHMI. Hundreds of JHMI faculty and staff have worked as work site supervisors over the years. HSCP student enrollees have accumulated over 200 employment years in JHMI at part-time jobs in the health field. Over 685,000 dollars in student stipends have been paid to enrollees. The purpose of this report is to summarize the results of a larger study that examines and evaluates the characteristics, development, and outcomes of HSCP for the years 1966 to 1974. The format of this summary report follows the main sections of the larger report: (1) background and study procedures; (2) literature review; (3) a profile of the 1966-1974 HSCP; (4) student evaluations of HSCP; and (5) an overall HSCP evaluation and discussion. (Author/JM)

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A SUMMARY

THE HEALTH SERVICES CAREERS PROGRAM: ¹ A 1966-1974
DESCRIPTIVE PROFILE AND PROGRAM EVALUATION

by

Gerald D. Williams, Ed.D.
Assistant Professor

Office of Health Manpower Studies
School of Health Services
The Johns Hopkins University

U.S. DEPARTMENT OF HEALTH,
EDUCATION & WELFARE
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¹Formerly called the Health Sciences Careers Program. In 1974 the name of the program was changed to be more representative of the different kinds of health occupations included in the program.

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THE HEALTH SERVICES CAREERS PROGRAM: A 1966-1974
DESCRIPTIVE PROFILE AND PROGRAM EVALUATION

The Health Services Careers Program (HSCP) at the Johns Hopkins Medical Institutions (JHMI) in East Baltimore is a multipurpose, interagency program designed to facilitate part-time employment, on-the-job training, and guidance in health occupations for economically disadvantaged high school students from the City of Baltimore. Since 1966, HSCP has enrolled over 1300 individual students through a variety of projects and obtained work-sites for the students at more than 100 different departments within JHMI. Hundreds of JHMI faculty and staff have served as work-site supervisors over the years. HSCP student enrollees have accumulated more than 200 employment years in JHMI at part-time jobs in the health field. Over \$685,000 in student stipends have been paid to enrollees, mostly through various Neighborhood Youth Corps (NYC) programs.

In terms of the vocational development of most of the enrollees, the "outcomes" of HSCP for 1966-1974 have been substantial. The development of HSCP, however, has very uneven. Uncertainties about program funds, diverse program objectives, and ambiguous interagency and community relationships have affected HSCP's direction and continuity over the years. The purpose of this report is to summarize the results of a larger study that examines and evaluates the characteristics, development, and "outcomes" of HSCP for the years 1966 to 1974. The format of this summary report follows the main sections of the larger report: (a) background and study procedures; (b) literature review; (c) a profile of the 1966-1974 HSCP; (d) student evaluations of HSCP; and, (e) an overall HSCP evaluation and discussion.

Background and Study Procedures

Rather than being a single program with an eight-year history of development, HSCP has been a collection of employment and work-study projects that have accumulated over the years. Some of the projects have evolved, e.g., Dunbar Medi-Schools; others have folded, e.g. School Without A Building. Most of the projects have been similar to the extent that they have been oriented toward economically disadvantaged youth and, to some degree, have had an employment orientation. Projects have differed in the emphasis on academic and vocational training. The next two paragraphs present a brief description of HSCP's history.

HSCP had its beginning as a summer work project in the laboratory sciences in the summer of 1966. High school juniors and seniors from low-income families in East Baltimore were recruited for the apprentice project and twenty-four students were selected to work in various JHMI laboratories during the summer. NYC provided student stipends. In the summer of 1967, a similar work project in biomedical research was funded by a contract with the U. S. Department of Labor. In 1968 operating funds were provided by a private donor and HSCP operated a program similar to 1966 and 1967. The first after-school segment of HSCP was formally established in the fall of 1968. In 1969 and 1970, HSCP was allied with a U. S. Office of Education curriculum design study in vocational education through the Baltimore City Public Schools (BCPS). Other health occupations were added to the science-oriented positions of previous summers.

In 1971, two projects ran parallel at JHMI during the summer, a vocational education and curriculum development project out of Dunbar

Community High School and an NYC summer employment program. HSCP enrollments increased from about 100 to nearly 400 students. The NYC employment component included positions in housekeeping, linen distribution, food services, etc., where on-the-job training was not included as part of NYC. The Dunbar related component, an extension of the Office of Education study, provided enrichment and instructional activities for the enrollees who were assigned to mostly laboratory, secretarial-clerical and child-care positions. The following summer, the two projects were repeated and combined summer enrollments in 1972 reached nearly 500 students. Scheduling conflicts and other issues developed between the two projects and the Dunbar summer program was discontinued as a separate project. Summer enrollments in 1973 were about 160 students, but sources of funds for student stipends were becoming very uncertain. NYC programs were being reorganized through Manpower Revenue Sharing to local governmental agencies and the effects for HSCP were unclear. Also, HSCP staff and operating funds were being reduced. In the summer of 1974, HSCP students were supported by the Baltimore Summer Corps (BSC) of the Mayors Office of Manpower Resources in Baltimore. Other projects operated in the fall programs of HSCP such as School Without A Building, NYC In-School and Out-of-School projects, but generally they were small, work-study programs related to vocational education in health careers. In summary, the 1966-1974 development of HSCP has been an evolutionary process marked by various projects, uneven enrollments, and funding uncertainties.

The need for the study on which this summary is based arose primarily from a lack of documented program information on HSCP. Restricted

funds under tighter economic conditions were causing concern and program accountability pressures were increasing. No current evaluations of the program were available. HSCP projects had accumulated over the years, the program had moved locations several times, and administrative staff had changed over the years. Program records were in disarray and, because of the project-by-project funding in general, enrollee records had not been kept in a systematic or cumulative fashion.

During the summer and fall of 1974, old HSCP files were examined to construct a cumulative directory of student enrollees and work-sites for 1966 through the summer of 1974. This information was used as the primary source of data to develop a composite 1966-1974 HSCP profile. After the directory was completed, program files were reviewed again for program reports and surveys of student reactions to HSCP. The surveys, some of which had never been reported, were used collectively to infer the probable vocational outcomes and impact of HSCP over the years. Such information is necessarily limited for evaluation purposes; however, the directory information and the data provided in the surveys at least permitted a data base for the evaluation. Besides a careful review of the program records of HSCP, interviews were conducted during the study with several administrators who were, or had been, responsible for HSCP.

Literature Review

Selected career and work adjustment theories, selected reports on programs similar to HSCP, and project reports regarding HSCP are presented in the larger report. This summary section presents the major conclusions of the literature review.

While no specific vocational development or career theory would possibly account for all the vocational behaviors of HSCP enrollees, theory has generally been underutilized in HSCP. This does not only relate to research and evaluation in HSCP, but also to use of theory to help focus career objectives in the program, establish expectations of student behaviors in certain kinds of work settings, and generally to provide a conceptual framework for some program operations, e.g., interest assessment and work-site and job descriptions. The theories of Super, Holland, Roe, and Tiedeman¹² are reviewed briefly because of their major contributions to vocational psychology. Each theory has points especially relevant to HSCP: Super's conceptualization of the self-concept in relation to vocational choices; Holland's model of personality types and environments which is easy to use in classifying persons, environments, and the interactions; Roe's perspectives on family influences in the primary orientations of people toward person-oriented or object-oriented occupations; and Tiedeman's view of the processes of decision-making in vocational development. The theory of Lofquist and Dawis⁸ on work adjustment is reviewed for its use of an interactional approach to work satisfaction and job performance determined by the relationship of a work personality and reinforcers present in work environments. The use of theory in HSCP would not deny the special problems of the HSCP enrollees who are mostly black, female, and economically disadvantaged. To the contrary, the use of theory and an understanding of those special problems could be complementary. The picture of the black individual in the vocational literature is fairly depressing, and more, not less, information is needed.¹¹

A report on In-School NYC programs by Ozgediz¹⁰ is reviewed in detail because of its modular approach to the basic functions in a program

similar in many respects to the overall HSCP. A modification of the model could be used in HSCP and would be just as applicable to work-study programs as summer employment projects in HSCP. Two other "output" studies, one involving NYC Out-of-School programs in New York City and the other involving results of "new careers," or paraprofessional personnel in meaningful and productive health positions, are reviewed.

Finally, five program reports on projects in HSCP since 1966 are reviewed for stated accomplishments and problems in the specific projects. In general, accomplishments appear to be in the area of positive student reaction and behaviors in the programs. Most project problems are related to issues of staffing, program operations, time constraints, and interagency relationships.

Profile of the 1966-1974 HSCP

This section presents the summary of a cumulative profile of HSCP for the years 1966 to 1974, and includes (a) a suggested taxonomy of HSCP stated program objectives, (b) a summary of student enrollments in HSCP through the summer of 1974, (c) a description of various work-sites in JHMI, (d) characteristics of the student enrollees in the program, and (e) some considerations of cost-benefit factors in HSCP. Koch and Hollander's ⁷ article contains descriptions of the different projects in HSCP and will not be covered in this summary report.

Overall, HSCP's major objectives have been fairly consistent over the years, even though priorities have varied depending upon project funding, e.g., the employment-only focus of NYC summer programs and the educational orientation of the projects with Dunbar Community High School. The program objectives, however, do present some subtle differences in

wording which suggest some long-range goals for what have generally been short-range projects. Table 1 presents a suggested taxonomy outline of some of the major objectives stated for HSCP over the years. The classification arranges the objectives on two dimensions: institutional or individual in primary focus, and immediate or developmental in terms of the probable length of time involved in achievement. Obviously, the categories are not mutually exclusive, nor is the taxonomy completely satisfactory. The taxonomy, however, does illustrate the point that both individual and institutional objectives are involved in HSCP. Secondly, many of the objectives have been stated in terms of processes that would imply more continuity in the program than has been HSCP's historically uneven development.

The number of student enrollees in HSCP has varied considerably in the eight years of the program. The largest variation has occurred with summer enrollments which have ranged from 24 at the beginning of the program in 1966 to over 450 enrollees in the combined summer projects in the summer of 1972. Fall programs have generally been smaller with an enrollment range of 18 to 106. Table 2 presents the total 1966-1974 HSCP enrollments that could be documented from old program records. Enrollees who have been terminated in HSCP are also presented in the summary table.

A total of 1890 HSCP enrollees could be documented from an examination of the old HSCP files. The total enrollment figure includes multiple enrollments or students who have enrolled for more than one term in the program. A term is defined as either an 8-week summer program or an approximately 24-week fall project. Thirteen hundred and forty-two individual students have enrolled in HSCP. This means that about twenty-seven percent of HSCP's enrollments during 1966-1974 have been students who have

Primary Focus of Objectives

Institutional

Individual

TABLE 1

Taxonomy of Stated 1966-1974 HSCP Objectives
Time Range of Probable Achievement

Immediate	Developmental
- To create a greater number of jobs for low SES students - To provide a supportive work environment - To provide on-the-job training - To promote good work habits - To aid students financially	- To motivate students to seek post-secondary school education - To help students improve their self-concept - To develop student talents and abilities - To motivate students to seek careers in health - To promote student communication skills
- To introduce low SES students to careers in health - To provide a means of dialogue between JHMI and the East Baltimore community - To demonstrate the usefulness of untrained high school students in laboratories - To explore work-study programs for other careers	- To recruit low SES students into health careers - To improve JHMI and East Baltimore community relationships - To introduce JHMI personnel to career development problems of low SES students - To develop a model for work projects in health for other medical institutions

TABLE 2

1966-1974 Total Enrollments in HSCP for
Summer and Fall Projects and Terminations

Year	Summer	Fall	Terminations ^a	Totals
1966	24	*	0	24
1967	27	*	0	27
1968	55	18	2	75
1969	57	34	11	102
1970	103	58	5	166
1971	375	106	46	527
1972	455	48	34	537
1973	160	55	18	233
1974	178	*	21	199
Totals	1434	319	137	1890

^aIncludes terminations of all kinds, e.g., no longer in school, dropped for personal reasons, fired, etc.

TABLE 3

Distribution of HSCP Enrollees in JHMI Divisions
and Percent of Division Departments Involved

JHMI Divisions	N of Enrollees	% of Enrollees	% Depts
Johns Hopkins Hospital	870	54	42
Hospital/School of Medicine ^a	335	21	*
School of Medicine	174	11	64
School of Hygiene & Pub- lic Health	116	7	35
School of Health Services	16	1	22
Other ^b	103	6	*
Totals	1614	100	45

^aSome sites could not be identified as Hospital or School of Medicine work-site classifications.

^bOther includes other hospitals in Baltimore, East Baltimore Medical Plan, etc.

enrolled in the program for more than one term. Participation in HSCP has ranged from one term only to three years of continuous enrollment in the program.

Tables 3 and 4 present summaries of the work-site locations of HSCP enrollees over the years. Table 3 presents the distribution and percentage of 1966-1974 enrollees by JHMI assignments in various divisions. By the work-site information in old HSCP files, it could not always be determined whether work-sites were affiliated with the Johns Hopkins Hospital or the School of Medicine. Roughly, about sixty-four percent of all the HSCP enrollees have been assigned to work-sites in Johns Hopkins Hospital. Student work-sites have been varied with students having assignments in over 100 different departments in JHMI. Table 4 presents a summary of the JHMI departments that have enrolled the largest percentage of HSCP enrollees over the years 1966 to 1974. Thirty-two JHMI departments have accounted for sixty-nine percent of the total enrollees in HSCP with the largest number of enrollees being employed in hospital positions.

While the types of occupations involved at each of the sites cannot be determined by departmental names alone, e.g., a secretarial position might be in a JHMI laboratory, some estimates can be made regarding the general health jobs areas in the program. Since 1966, about eleven percent of the total HSCP enrollees have been involved in nursing positions; about eleven percent have been in child-care occupations; eight percent have been in food services; about seven percent in supply and distribution positions; and, about three percent of the jobs have been in laboratory areas. The JHMI work-sites, overall, have been extremely varied and, contrary to opinion, most of the health occupations involved have not been housekeeping and medical records.

TABLE 4

JHMI Departments with Largest Percentages of HSCP
Enrollees from 1966 through Summer 1974

Departments	JHMI Division	Enrollee N	Enrollee %
Biomedical Engineering	M	18	1.1
Brady Nursing Unit	JHH	30	1.9
Central Supply	JHH	39	3.4
Child Life	JHH	78	4.8
Diagnostic Laboratory	JHH	21	1.3
Environmental Health	H	19	1.2
Hospital Nursing Unit	JHH	26	1.6
Hearing & Speech	JHH	25	1.5
Housekeeping	M/JHH	59	3.7
JFK Institute	M	20	1.2
Linen Distribution	JHH	40	2.5
Main Kitchen	JHH	43	2.7
Medical Care & Hospitals	H	21	1.3
Medical Records	JHH	46	2.9
Medicine	M/JHH	27	1.7
Nursing Services	JHH	36	2.2
Nutrition	JHH	18	1.1
Nutrition Storeroom	JHH	27	1.7
Occupational Escort	JHH	34	2.1
Oster Nursing Unit	JHH	25	1.5
Outpatient Department	JHH	34	2.1
Outpatient Nursing	JHH	22	1.4
Parent & Child Center	JHH	62	3.8
Pathology	M/JHH	22	1.4
Pediatrics	M/JHH	55	3.4
Pharmacy	JHH	36	2.2
Physiological Chemistry	M	18	1.1
Psychiatry	M/JHH	19	1.2
Radiology	M/JHH	60	3.7
School of Hygiene ^a	H	37	2.3
Staff Cafeteria	JHH	35	2.2
Women's Clinic	JHH	44	2.8

^aDepartmental assignments not specified.

Students in HSCP over the years have represented over thirty different schools in Baltimore City with the largest percentage (48%) of the enrollees being students in Dunbar Community High School. Grade levels have ranged from eighth to past twelfth grade. Most of the enrollees in HSCP after 12th grade have been summer enrollees following high school graduation. The majority of HSCP enrollees have been 11th and 12th grade students. As might be expected, many of the enrollees live in areas near JHMI with about 44% of the enrollees listing home addresses that are in or adjacent Zip Code areas of Johns Hopkins. With the exception of two Zip Code areas, HSCP enrollees have home addresses in every Zip Code area in Baltimore City (see Figure 1 on page 13).

Ninety three percent of all the HSCP enrollees for 1966-1974 are black and a little over seventy percent are female. Income figures for families of the enrollees are sparse, but estimates suggest that about forty percent of the HSCP enrollees come from families with total incomes of less than \$4,000 per year. Eighty percent of the HSCP enrollees report total family annual incomes of less than \$8,000. Occupational interests of HSCP enrollees were estimated from a couple of administrations of an interest inventory. Results suggest a science orientation for nearly half (49%) of the males in HSCP and a social orientation for most (53%) of the females. Interest areas were varied.

Job performance evaluations by JHMI work-site supervisors suggest work performance of the HSCP enrollees at better than satisfactory levels. The percentage of enrollee terminations has been small (about 7%) over the years and only one percent of the HSCP enrollees are known to have been fired. Work performance standards for HSCP enrollees has been uneven over the years, but attendance and punctuality have been usual criteria.

BALTIMORE CITY

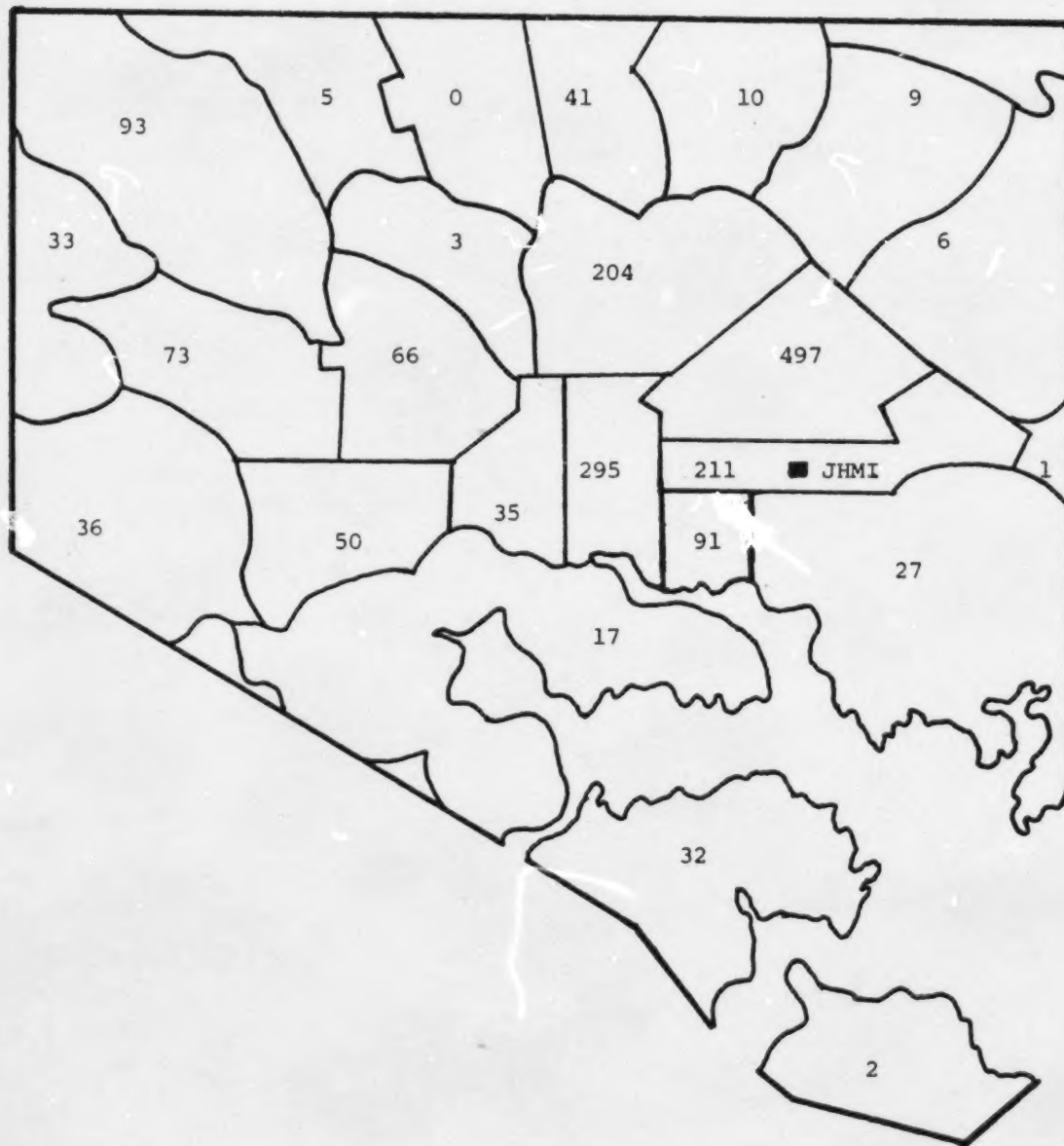


Figure 1. Distribution of the Number of HSCP Enrollees by Home Address Zip Codes in the City of Baltimore. Missing Data (N=51)

HSCP enrollees have contributed more than 424,000 hours of part-time employment to JHMI since 1966, with about 64% of the labor contribution to the Johns Hopkins Hospital. Cumulatively, the number of employment hours roughly translates to about 212 years of JHMI employment. Through NYC mostly, although some departments have contributed wages for HSCP enrollees, an estimated \$685,000 has been paid to enrollees in the form of stipends. Program costs are difficult to estimate, but HSCP staff and operations expenses have been funded under an NIH Special Projects grant over the last few years. JHMI work-site supervisors have been volunteers in the program. Processing students for employment at JHMI has involved some costs to JHMI, but such expenses are probably small compared to program costs overall. HSCP staff has generally been small. A full-time HSCP director was not appointed until 1970. Some summer projects have had many part-time personnel, but typically HSCP has functioned with one director and one secretary.

Enrollee Evaluations of HSCP

Over the years, about nine studies have been conducted or attempted with HSCP. Most of the studies have involved follow-up surveys of student reactions to HSCP. Perhaps because of the length of most of the HSCP projects some of the survey results have not been reported. In the conduct of this study, completed surveys were abstracted and some surveys in HSCP files were coded and tabulated if the data appeared reasonably complete or were recent. Surveys in the program have been conducted for the years 1966 through 1968, and summer programs in 1969, 1970, 1973, and 1974. One survey is included for the fall program in 1973.

In a brief follow-up survey of HSCP enrollees from the 1966-1968 programs, twenty-nine percent of the respondents were in college at the time of the survey. Fifty-two of approximately 85 former HSCP participants responded to a questionnaire which asked whether HSCP had influenced them regarding fifteen different areas. Fifty-eight percent of the respondents indicated that HSCP had influenced their selection of a college major or career. Ninety percent indicated that HSCP had provided inspiration and increased knowledge. It should be noted that 1966-1968 programs in HSCP were fairly selective with a format based upon apprenticeship-type relationships between the enrollees and faculty supervisors. Forty-eight percent of the respondents indicated that HSCP influenced them in selecting work in the paramedical or biomedical area as a lifetime job.

A follow-up survey of enrollee reactions to the 1969 HSCP, which was allied with the curriculum design project through Dunbar Community High School, was also conducted in 1969. The survey was directed toward student reactions to work at JHMI. Ninety-six percent of the fifty-seven enrollees in the program indicated that the program would be of help to them in the future. The same percentage indicated that they had learned during the summer, and 98% stated that they would recommend participation in the program to their friends. Eighty-four percent of the respondents stated that they felt a part of the group with whom they were working during the summer. Reactions to jobs in the program were less enthusiastic. Nearly half of the students thought their work was tiring and the same percentage thought their work was boring. About half of the enrollees lost some time at work during the summer, and half of the students reported trouble in getting paid.

A follow-up survey of enrollee reaction to the 1970 HSCP summer program, which was nearly identical to the program of 1969, was conducted. Responses, however, were only obtained from 62% of the 103 enrollees in the program. Over eighty percent of the respondents reported that they felt a part of their working group and that they got along with their co-workers. Forty-eight percent reported that the program assisted them in making a career choice. Overall reaction to the program seemed fairly positive, but the missing data suggest caution in overestimating results of the survey.

A survey of enrollees in the 1973 summer HSCP obtained a response rate of 76%. Seventy-eight percent of the enrollees reported that HSCP has been a great or some influence in their career choices. The influence of student stipends was explored by the question of whether the enrollees would participate in HSCP if no salaries were provided. Eighteen percent indicated that they would participate without wages, and 38% indicated that they might. Forty-percent of the HSCP enrollees stated a definite no to HSCP participation without pay. HSCP enrollees thought that their work supervisors were extremely helpful (56%) or moderately helpful (38%). Seventy-six percent of the respondents indicated an interest in returning to HSCP the following summer.

A follow-up survey was also conducted with HSCP enrollees in the 1973 fall program. About one-third of the enrollees in this fall program were unpaid participants from Eastern High School. About half of the students indicated that they were very certain about their career plans and 56% reported that they expected their future occupation to be in the health field. Fifty-two percent stated that they had made some vocational decisions from participation in HSCP. A categorization of the decisions suggested that most were positively oriented in terms of vocational decision-making.

Not all students made health career decisions. Some decided not to continue in health careers. In this sense, the HSCP work experiences probably provide a self-screening experience for students. Fifty-eight percent of the respondents believed their work experiences had had a positive effect on their school work. Three questions asked about general knowledge gained from HSCP. Most (75-80%) of the enrollees felt that they knew more about the problems and issues of health care, knew more about hospital services and how to use them, and understood more about their own health. Although 1/3 of the students were volunteer trainees, all the students were asked if they would be unpaid participants in HSCP. About 36% stated they would not participate in HSCP without stipends.

Ninety-two percent of the respondents stated they would recommend HSCP participation to a friend. Thirty percent of the enrollees thought that they were frequently or almost always asked to do the jobs no one else wanted to do. Ninety percent of the enrollees felt very satisfied or satisfied with their overall experiences in HSCP. When asked to rank their most and least important source of work satisfaction, getting a sense of achievement or accomplishment from a job was ranked the highest. The least important was being able to satisfy one's curiosity about things. Internal and external sources of satisfaction were about evenly ranked in importance.

A follow-up survey of 1974 summer HSCP program by the Baltimore Summer Corps obtained a response rate of only 47%. The data are reviewed because of the recency of the data. Ninety-five percent of the respondents reported that their supervisors had been easy to talk to and receptive to questions. Some students felt underutilized in their jobs.

Half of the students felt they were able to use previously developed skills on their jobs, but 76% felt that they had developed new work skills in their summer jobs. The vast majority (90% and above) responded that they thought the program developed a better understanding of what the working world was really like, that they planned to return to school in the fall, and that they would consider BSC work the following summer. One free-response item asked what income benefits were derived from the BYC program. Additional family income (40%), school expenses (26%) and money for personal wants (24%) were the most frequently listed income benefits. A rough categorization of different skills learned listed by the enrollees indicated about 20% in the direct patient-care area, e.g., taking blood pressure, applying slings, changing dressings, working with the deaf, etc. Other areas included operating machines (16%), laboratory and research skills (11%), food services (13%), and other (30%). Learning to work with people was the most frequently listed skill.

In summary, the survey data suggest that, over the years, about half of the HSCP participants report career decisions that are attributed to participation in HSCP. Simply working with people and acceptance of co-workers seems to have a large impact on the student enrollees. This may be the greatest learning outcome for the job experiences in HSCP, especially for students who are encountering an actual job experience for the first time. About half of the students appear directed toward health careers, and relatively few are totally uncertain about their career plans. The reaction of enrollees to the program appear favorable, with areas regarding utilization of skills they feel they have and acceptance by co-workers playing a major role in the career impact of HSCP.

Most of the HSCP enrollees have aspirations toward post-secondary education which, whether realistic or not given their economic situations, does indicate an expectation to complete high school. There are no data available to support the conclusion that HSCP helps to keep students in school or college. The influence of student stipends on the holding power of HSCP is probably quite substantial and it is doubtful whether the summer program, especially, could operate without student stipends.

An Overall Evaluation of HSCP

This final section highlights the overall evaluation of HSCP. A few comments are necessary to define the context of the evaluation. First, in evaluation projects with programs in complex systems, the purpose of evaluation is not only to answer whether program objectives are being met, but also to answer what the consequences of the program are. This is the general sense of the evaluation. Secondly, the assessment of HSCP is based upon a global evaluation that incorporates common "outcomes" and problems for the total 1966-1974 program. Finally, the major points of the evaluation are intended to provide information that will be useful to further the development of HSCP. This represents a judgment that, overall, HSCP has been a positive program mutually beneficial to JHMI and to most of the students served. The general criticism of HSCP is that the potentials of the program have not been fully developed either in terms of student career development objectives or JHMI institutional objectives. The following evaluation statements are presented:

1. "Outcomes" in terms of the vocational development of HSCP
student enrollees appear to have been quite substantial. About half of the enrollees attribute some career planning decisions to HSCP participation.

Nearly 80% of the enrollees report plans to further their education beyond high school. Students report an overwhelming acceptance by work supervisors and co-workers at JHMI. Overall, the job experience at JHMI appears to provide positive educational "outcomes" for the enrollees. The vocational development outcomes are moderated by many students who have decided on a career before entering the program and by some menial jobs that have little career potential. The reinforcement value of job experiences in HSCP to strengthen vocational decisions and career planning has not been fully explored.

2. Major problems in HSCP have not been with student enrollees.

The number of terminations and job transfers in HSCP have been minor. There has been a tendency to exaggerate problems with regard to HSCP, e.g., thefts, terminations due to pregnancies, etc. In terms of the total enrollments in HSCP, the proportion of work and personal problems have been negligible. This is an important point that relates to the overall image of HSCP. The personal conduct and work performance of student enrollees as reported by work supervisors has been exceptional. Especially with programs involving youth, disproportionate amounts of staff time are sometimes involved with individuals who cause "problems" in the system. A reward system for those many HSCP enrollees who exhibit outstanding performance has not been fully developed.

3. Major problems in HSCP have frequently been in the area of community relations. Historically, HSCP has operated in a politically and racially sensitive environment. Both in terms of JHMI and the East Baltimore community, more may be expected of HSCP than the program can deliver. Community relations problems in HSCP also have a corollary:

- 3A. Subadministrative negotiation in HSCP interagency planning has been ineffective because of the complex community factors involved and because institutional limitations have

not been specifically declared. Planning meetings may involve more interracial diplomacy than hard negotiations of mutually beneficial objectives for the institutions involved.

4. HSCP has been economically beneficial to JHMI and to HSCP enrollees. Both in terms of labor return to JHMI and the external funding for student stipends, the financial costs of HSCP to JHMI have been small compared to service benefits to JHMI divisions. The costs involved with the voluntary time of work supervisors in supervising and providing on-the-job training are unknown. It seems reasonable to assume, however, that when the "returns" to departments are out of line with the "costs" involved, the number of work-sites in JHMI would decrease. This has not been the case. The number and different types of work-sites at JHMI have increased since 1966. Because of the employment focus of the summer HSCP projects, the economic returns to JHMI have been greater than in the fall HSCP projects. The most effective utilization of HSCP enrollees and "balancing" training costs with service return have not been fully examined. However, should external funds for student stipends be discontinued, economic investments in HSCP would need to be questioned.

The financial benefits of HSCP to enrollees in the program are fairly obvious. A conservative estimate is that \$685,000 has been paid to HSCP enrollees in student stipends. Family income data on the HSCP enrollees has not been uniformly collected, but it is estimated that about 60% of the HSCP enrollees come from families with total incomes of less than \$6,000, and 80% of the enrollees come from families with total incomes of less than \$8,000.

5. Although oriented toward careers and career development, HSCP has not made use of career and work adjustment theory. This lack of a theoretical perspective and the utilization of vocational literature has had consequences in program failures to fully develop rationales for

operational priorities. For example, the "matching" of HSCP enrollees with job positions that correspond to enrollees' vocational aspirations has been informal. Simply placing students in job slots has been given more priority than developing viable work experiences to maximize career potentials for HSCP enrollees. Frequently, the onus of work adjustment has been on the HSCP enrollees without consideration of the training and quality of JHMI work-sites. Work-sites and work supervisors have not been monitored systematically. The recruitment and health career potential for training in some jobs seems questionable for the program. For job satisfaction at least, the vocational literature seems to indicate better results with jobs that are congruent with a person's interests, abilities, and vocational aspirations.^{4,5,8,12}

6. The balance between "qualitative and quantitative" issues in HSCP's development have not been resolved. Overall, summer programs in HSCP have tended to be employment-oriented with large student enrollments. Fall programs have been smaller and oriented more toward vocational training. For program development, this has meant different program operations and orientations that have not mutually reinforced the program's overall development. In a sense, the program has a "split personality." The qualitative and quantitative issues are extremely complex, but have often contributed to staff frustrations and discontinuity in HSCP. Given the financial assistance questions for mostly black, inner-city enrollees in HSCP and the purposes of most youth manpower programs, this issue is particularly sensitive. However, it might be more beneficial in the long run to develop a uniform year-around HSCP format involving more on-the-job training and occupational development in health careers. Job training for specific occupations could be developed.

Quality and quantity are not necessarily incongruous, but there would appear to be implications for HSCP's future directions.

7. HSCP has been understaffed. Often, HSCP staff has consisted of one director and a full-time secretary. Some curriculum-related projects have been well-staffed, but HSCP development and operations problems have seemed a factor of insufficient staff to maintain relationships with work-site supervisors, monitor student enrollees, process student applications, follow-up on problems that occur in the program, maintain interagency relationships, and generally coordinate enrollee accounting records to promote the smooth flow of the program. The problems have been particularly acute during 1972-1974 summer projects with large enrollments. Some student accounting problems might be eased by data processing and standardization of enrollee forms.

8. Over the years, many long-range objectives and expectations of the program have been stated for short-term projects. Table 1 presented a tentative typology of stated HSCP program objectives. The program objectives were not inclusive of all the stated objectives, but rather were abstracted to illustrate contextual problems with HSCP objectives as they have been stated over the years. For example, a major institutional objective has been the recruitment of young people into health careers. This has been an almost impossible objective to evaluate given the short-term duration and funding of most HSCP projects. Longitudinal studies to follow-up on the career patterns of HSCP enrollees have not been supported by funding agencies nor planned for in HSCP's design. Another major objective of HSCP has been to improve JHMI and East Baltimore community relationships. This institutional objective would seem to be a longer range goal of HSCP and more related to staff efforts than student "outcomes." Those individual objectives involving motivation

toward health careers are categorized as developmental because achievement of an on-going process would seem largely unobtainable in the typical duration of most HSCP projects.

9. Evaluation of HSCP has been uneven and unsystematic. This relates both to the funding situation of HSCP over the years and somewhat of a reluctance to evaluate a program which is politically and economically sensitive. Funds for program evaluation have been difficult to obtain from the agencies such as NYC and the U.S. Department of Labor. Internal staff resistance to program evaluation has probably reflected a feeling that research would simply mean more work for the staff. Too, evaluation can be scary. There has been a general mistrust of research and evaluation efforts. Understandably, the use of measurement with regard to the vocational development of blacks have been suspect as culturally biased.¹¹ These have been acute issues with regard to attempting evaluation with HSCP and, while justifiable concerns, the lack of research and evaluation has probably hampered the full development of program potentials.

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